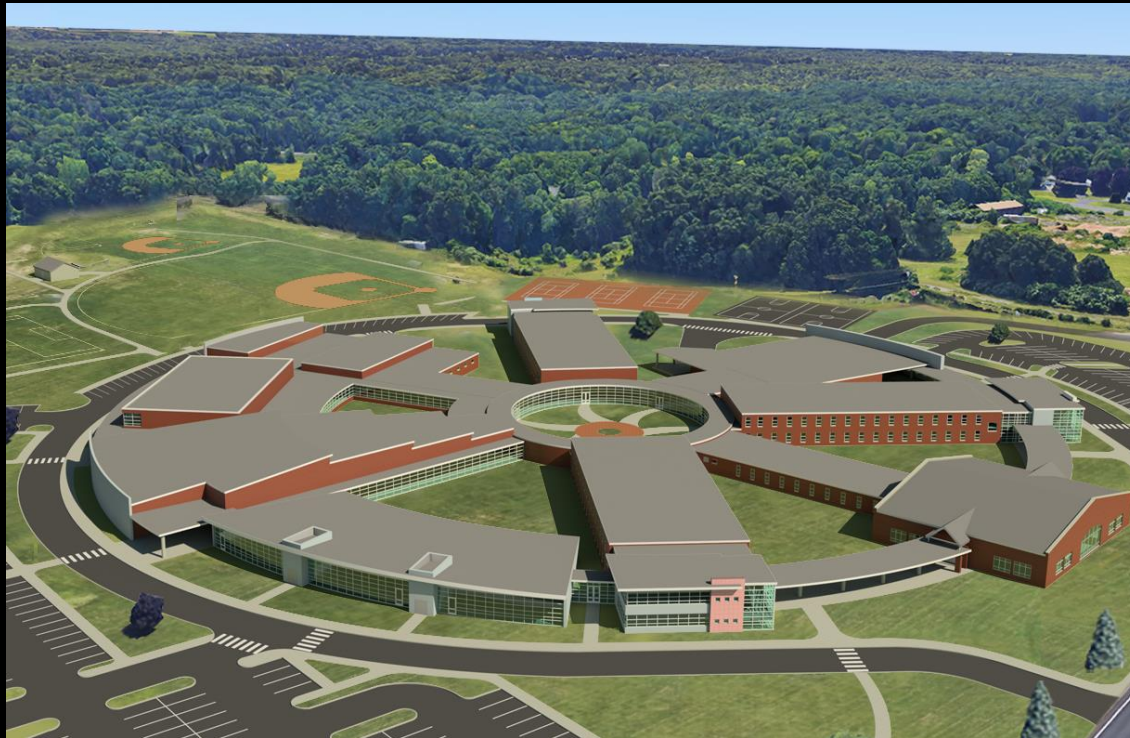


Town Council Presentation
August 07, 2017



TOWN OF ENFIELD
FEASIBILITY STUDY FOR JFK MIDDLE SCHOOL

JFK Middle School Feasibility Study – Existing Facility Analysis

Most of the original casework does not contain the mini required by Federal law and the Connecticut State Department of Education. In addition, sink workstations in many



appear to be original to the building and are in fair condition. However, replacement and/or modification near future due to the lack of accessibility. In a renovation would be required.



The gymnasium is extremely in need of repair, special wood bleachers, wall pads, portions of flooring at exterior sills. The operable walls are functioning properly and should continue to be maintained for their use. The locker room boys and girls, need to be fixed and refinished. The locker wooden benches in the boy room are rusted and worn. The locker room is in better condition the shower arrangement is efficient with the current academic program. Lockers located in academic corridors are of a condition and in need of repair.

Town of Enfield
Feasibility Study – John F. Kennedy Middle School



Recommendations

Clean and snake roof drains, piping, gutters and leaders to allow proper drainage. Secure debris grates to roof drains to prevent overflow drainage is not achieved via spill over, provide secondary accommodations per the 2012 International Plumbing Code drains which discharge to grade accordingly to an approved

Remove all existing insulation which may contain asbestos insulation on existing and new pipe, insulated with 1" mini insulation with fire retardant vapor barrier jacket and pre-fabricated jacket.

Building Drain, Waste and Vent (DWV) System

The building is provided with a sanitary and vent system piping of all plumbing fixture drainage. Each wing of the building which is drained via gravity to the site sewer system. All vent atmosphere thru the roof.

Piping material consists of hub and spigot cast iron and no-system. Copper DWV piping with soldered joints and fittings wing toilet groups, PVC and cast iron piping has been provided. Conversations with facility staff the drainage system becomes clean due to lack of required cleanouts.

Town of Enfield
Feasibility Study – John F. Kennedy Middle School



Fire Pump

An Electric fire pump controller is provided, manufactured by Hubbell (1994), and a new jockey pump has been recently installed. The fire pump motor appears to be in proper working order although the pump bearings are oxidizing and are badly corroded. Various other system components, piping, etc. show signs of early corrosion or are fully corroded. Some additional system components, mainly the butterfly and OS&Y shut off and control valves, appear to be recently installed as they are visually better in appearance and condition.

Town of Enfield
Feasibility Study – John F. Kennedy Middle School

JFK Middle School Feasibility Study – Existing Facility Analysis

JOHN F. KENNEDY				
TAG NO.	ASSESSMENT	SYSTEM/ CODE REFERENCE	RANKING	
PLUMBING/FIRE PROTECTION				
P1	Pool / Locker Room Domestic Hot Water System	2012 IPC		2
P2	Kitchen Domestic Hot Water System Replace in Kind	2012 IPC		2
P3	Kitchen Domestic Hot Water System Recommendations	2012 IPC		2
P4	Classroom Wing Domestic Hot Water Systems	2012 IPC	3	
P5	Shop Wing Domestic Hot Water Systems	2012 IPC	3	
P6	Admin Wing Domestic Hot Water Systems	2012 IPC	3	
P7	Portions of the drainage sytem are clogged or experience poor flow	General	4	
P8	Kitchen Grease trap	CT FOG permit	4	
P9	Science lab neutrulizers	2012 IPC	4	
P10	Art & Shop wing drainage	General	4	
P11	Shut off Valves serving water distribuion piping through out are failing	General	3	
P12	Exposed metal piping, pumps, equipment in the Pool Filter room are corroding	General		2

JOHN F. KENNEDY MIDDLE SCHOOL - FACILITY CONDITIONS ANALYSIS									
TAG NO.	ASSESSMENT	SYSTEM/ CODE REFERENCE	RANKING					ITIMIZED ESTIMATED COST	REMARKS
TOTAL ESTIMATED COSTS									\$ 16,639,600
TOTAL ESTIMATED COSTS BY RANKING									
									\$ 1,185,500
									\$ 9,431,000
									\$ 4,032,700
									\$ 1,990,400

LEDGEND PRIORITY - RANK

1	Urgent priority - These items should be corrected as soon as possible and most likely encompass code, health and life safety issues.
2	High priority - These items should be corrected within a reasonable amount of time after the highest priorities referenced above. These may be associated with high priority maintenance issues or accessibility issues for the physically challenged. Maintenance items have a remaining useful life from 1-3 years.
3	Moderate priority - These items may be associated with aesthetic or general maintenance issues. Remaining useful life of 3-5 years.
4	Low priority - These items include maintenance and aesthetic issues that are not in current need of replacement, but should continue to be monitored on a regular basis. These items typically have a remaining useful life of 5-10 years or greater.

TOTAL PROJECTED MAINTENANCE COSTS: \$16.6 Million



Silver Petrucelli + Associates

Architects & Engineers

JFK Middle School Feasibility Study – Programming

Town of Enfield
JFK Middle School
SPACE PROGRAM TEMPLATE
PREFERRED CONCEPTUAL PLAN - June

Projected Enrollment - 1200 Students SPACE COMPONENT (Existing Location) (New Location - If Different) (Space Component Requested by Staff but Not Provided in Conceptual Plan)	No.
Administrative / Staff	
MAIN OFFICE / ADMINISTRATION	
Main Office	1
Break Room	1
Principal's Office	1
Administrative Assistant Office	1
Storage	1
Conference Room	1
Assistant Principal Office (Red)	1
Secretary Office (Red)	1
Assistant Principal Office (White)	1
Secretary Office (White)	1
Assistant Principal Office (Blue)	1
Secretary Office (Blue)	1
GUIDANCE	
Open Office	1
Storage	
Guidance Coordinator Office (Shared w/ Psychologist)	1
Guidance Counselor Office	1
Guidance Counselor Office	1
Guidance Counselor Office	1
Guidance Counselor Office	1
Guidance Counselor Office	1
Conference Room (1)	1
Career Center	
Computer Lab	

Existing JFK Middle School				Conceptual JFK Middle School					Remarks
EXISTING NET SQUARE FOOTAGE				PROGRAMMED SQUARE FOOTAGE REQUIRED					
Projected Enrollment - 1200 Students SPACE COMPONENT (Existing Location) (New Location - If Different) (Space Component Requested by Staff but Not Provided in Conceptual Plan)	No.	Area NSF	Total NSF	No.	Added Area NSF	Reduced Area NSF	Total NSF	2017 Provided	
Miscellaneous									
In School Suspension (I.S.S.)	1	539	539	1			539	400	
HUB-Sa	1	248	248	1		248	0	0	
HUB-Sb	1	167	167	1		167	0	0	
Mechanical Room	1	20	20	1		20	0	0	
Innovation / Collaboration Lab			0	1	1000		1,000	1,105	Modified - CD Meeting 3/29
Innovation / Collaboration Lab			0	1	1000		1,000	1,105	Modified - CD Meeting 3/29
Innovation / Collaboration Lab			0	1	1000		1,000	1,105	Modified - CD Meeting 3/29
Gymnasium/Auditorium Entrance Vestibule			0	1	300		300	542	Modified - CD Meeting 3/29
Gymnasium/Auditorium Lobby			0	1	750		750	1,200	Modified - CD Meeting 3/29
MISCELLANEOUS TOTALS			974		4050	435	4,589	5,457	
EXISTING JFK MIDDLE SCHOOL with Circulation factor (33.27%)			129,637 172,762						
PROPOSED CONCEPTUAL MIDDLE SCHOOL with Circulation factor (34.10%)							161,107 216,057	160,423 215,140	

PROPOSED JFK MIDDLE SCHOOL PROGRAM : 215,140 GSF

Silver *Petrucelli* + Associates

Architects & Engineers

JFK Middle School Feasibility Study – Space Standards

Maximum Projected Population (per Milone & MacBroom Demographic Study)

2022-23 School Year = 1215 Students

Total Allowable Square Footage = 197,640 GSF

Total Building SF (per Plan Option 5) = 215,140 GSF

(Non-Reimbursable Programs as determined by the State)

Pool + Mechanical = 5,216 nsf*

Auditorium + Support = 12,446 nsf*

Total Non-Reimbursable Area in Design = 17,662*

Total Building SF (Minus Non-Reimbursable) 197,478 GSF

SPACE STANDARDS WORKSHEET

With the application for any N (new), E (extension), A (alteration, or RNV (renovation) project, or combination.

State Standard Space Specifications

Grades									
4	5	6	7	8	9	10	11	12	
Allowable Square Footage per Pupil									
124	156	156	180	180	180	194	194	194	
120	152	152	176	176	176	190	190	190	
116	148	148	170	170	170	184	184	184	
112	142	142	164	164	164	178	178	178	

Find the range within which your school's highest projected 8 year enrollment falls.
Now for only those grades housed within the school.

Pre-K	6	148
K	7	170
1	8	170
2	9	
3	10	
4	11	
5	12	

(a) Total (grades Pre-K through 12)	488
(b) Number of grades housed	3
(c) Average [(a)/(b)]	162.6667
(d) Highest Projected 8-year enrollment	1,215
(e) Maximum Square footage [(c) x (d)]	197,640

3. Total square footage at completion of project:	
a. Existing area constructed pre-1950	0
b. Multiply "a." by 80%	0
c. Area (at completion of project) constructed 1950 or later	197,478
d. Square footage for space standards computation (b+c)	197,478

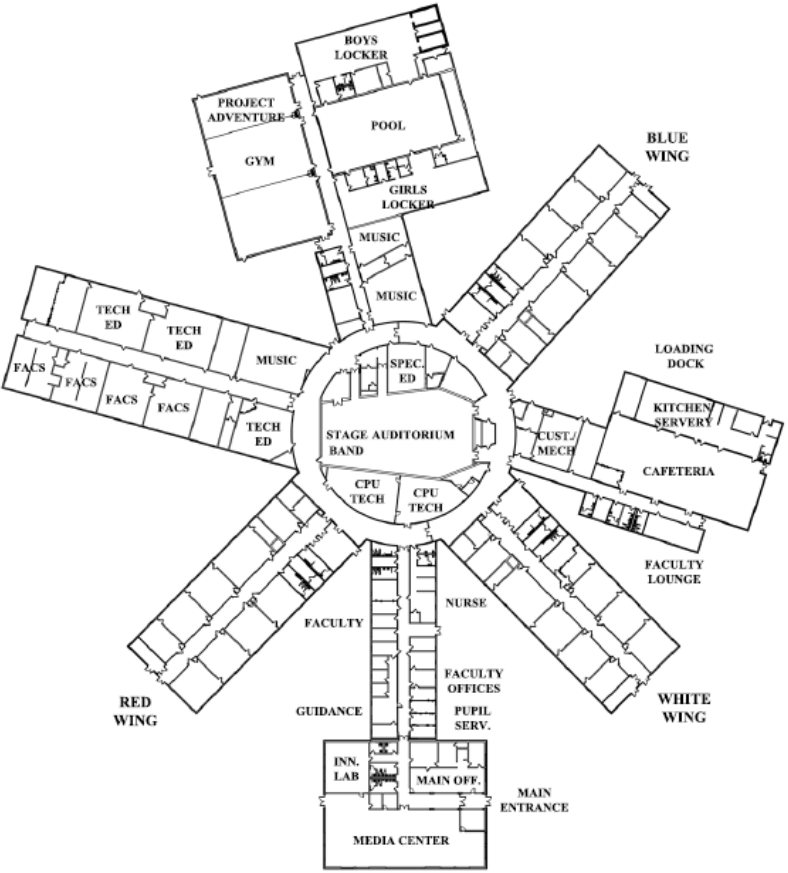
If line 2 (e) is greater than line 3(d) there is no grant reduction
If line 3 (d) is greater than line 2 (e), divide line 2 (e) by line 3 (d)

No grant reduction
0.00% *

*This factor will be used to reduce total eligible costs because of space in excess of the maximum eligible for reimbursement. If a project exceeds the standards solely as the result of extraordinary programmatic requirements, the superintendent may submit a request to the Commissioner for a waiver. A detailed list of space allocations for all extraordinary programs with explanations must be included with the request.

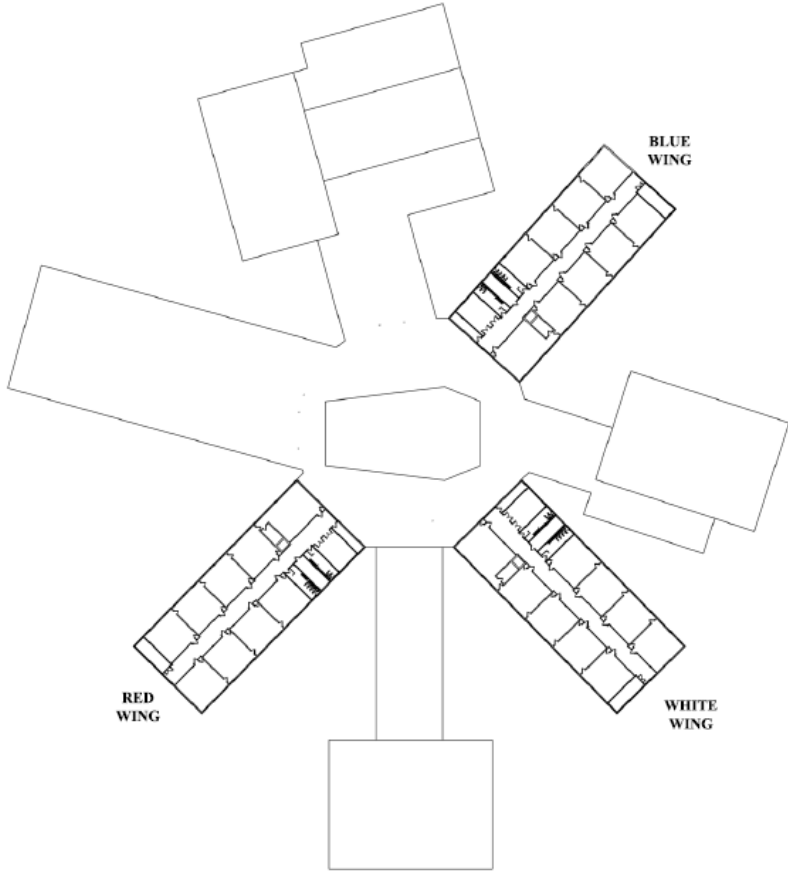


JFK Middle School Feasibility Study – Existing Floor Plans



EXISTING - MAIN LEVEL

SCALE: 1" = 80'-0"



EXISTING - UPPER LEVEL

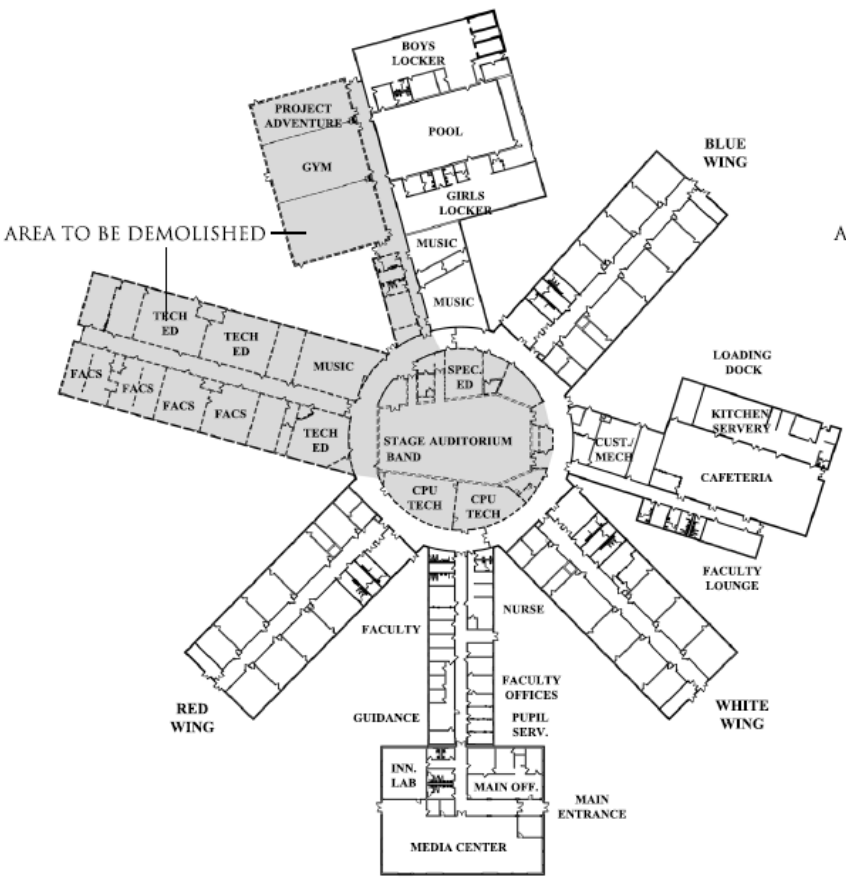
SCALE: 1" = 80'-0"



Drawing Number: E1	
Date: 08.17	Scale: 1" = 80'
Drawn By: S.A.	Check By: S.A.
Project Name: EXISTING MAIN AND UPPER LEVEL PLANS	
Project Location: SILVER / PETRUCELLI + ASSOCIATES Architects & Engineers 155 Ruffa Road, Enfield, CT 06032 Tel: 413.243.8007 Fax: 413.243.8007 www.silverpetrucelli.com	
Project Title: Town of Enfield JFK Middle School Additions & Renovations Pre-Referendum Concept Phase 155 Ruffa Road, Enfield, CT 06032	

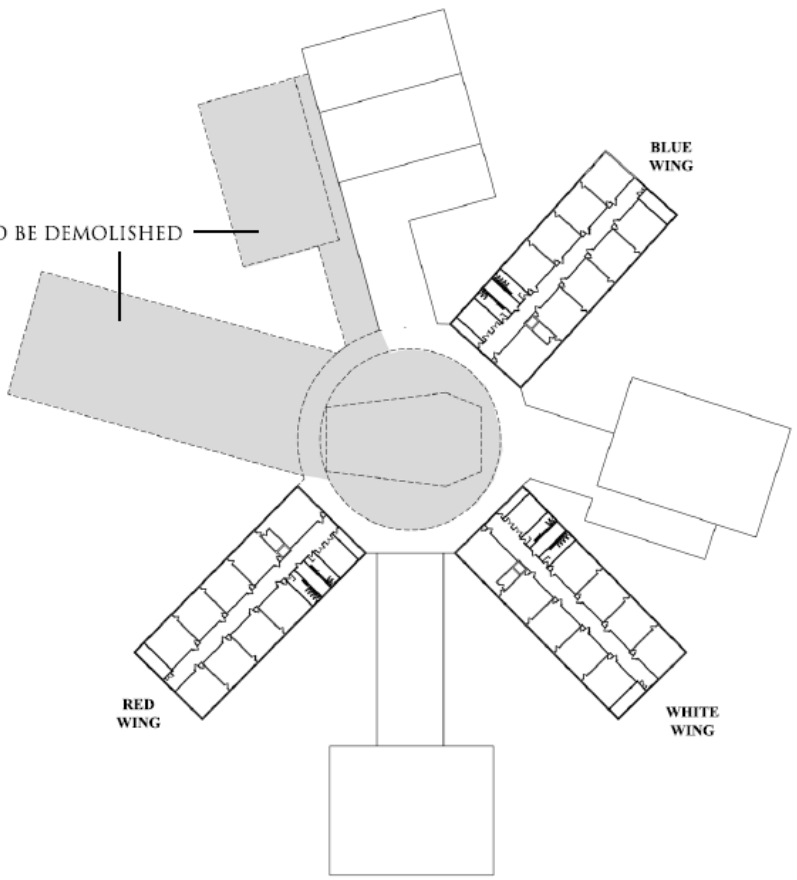


JFK Middle School Feasibility Study – Proposed Demolition Plans



EXISTING - MAIN LEVEL

SCALE: 1" = 80'-0"

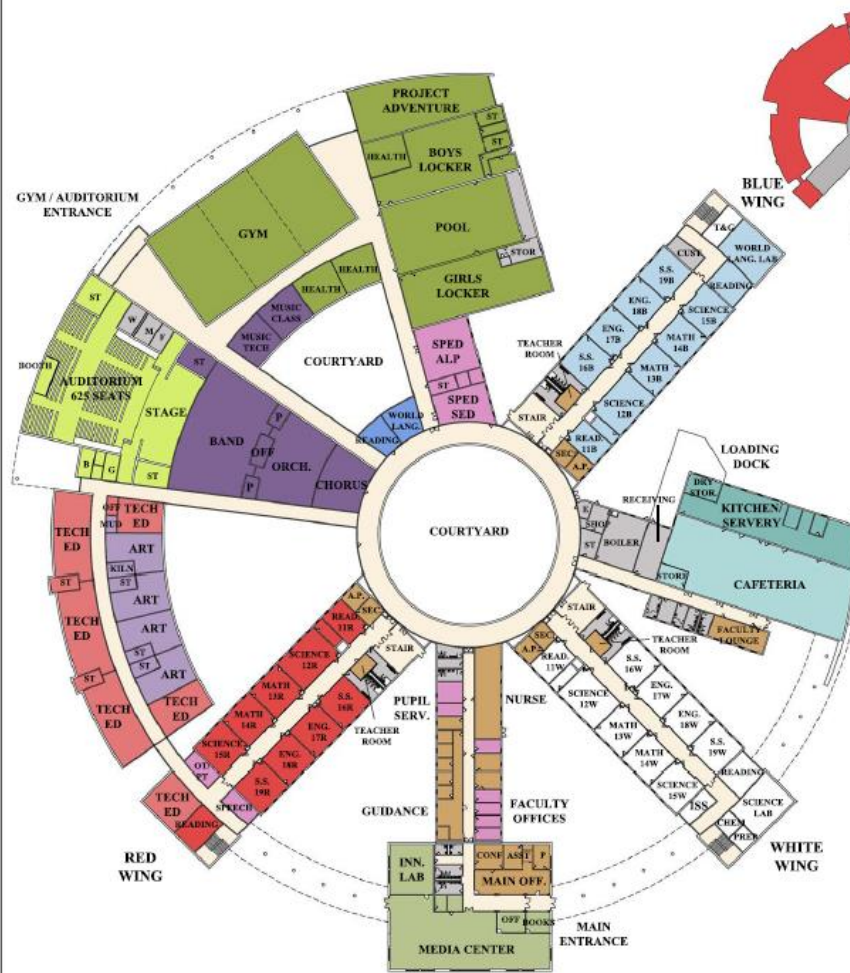


EXISTING - UPPER LEVEL

SCALE: 1" = 80'-0"



JFK Middle School Feasibility Study – Preferred Floor Plans

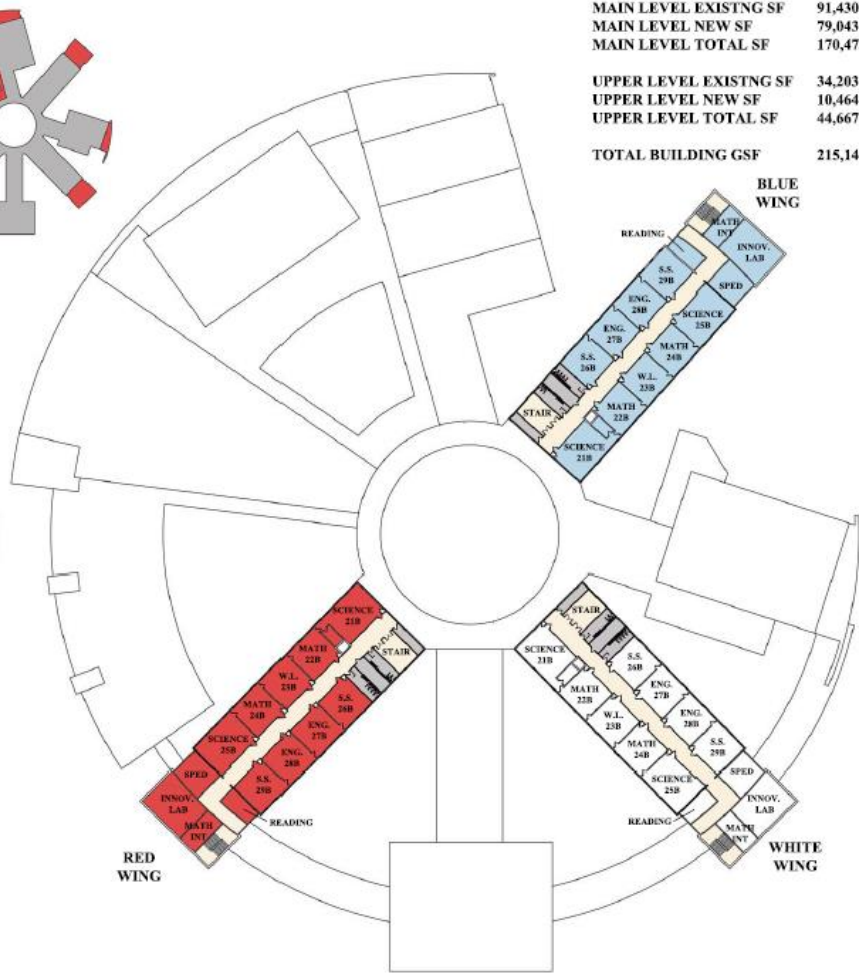


MAIN LEVEL PLAN

SCALE: 1" = 80'-0"

1

A5



UPPER LEVEL PLAN

SCALE: 1" = 80'-0"

2

A5

MAIN LEVEL EXISTING SF	91,430
MAIN LEVEL NEW SF	79,043
MAIN LEVEL TOTAL SF	170,473
UPPER LEVEL EXISTING SF	34,203
UPPER LEVEL NEW SF	10,464
UPPER LEVEL TOTAL SF	44,667
TOTAL BUILDING GSF	215,140

Sheet No.	A5
Scale	1" = 80'-0"
Project No.	06082
Revision	

PREFERRED CONCEPTUAL
PLAN - MAIN AND UPPER
LEVEL PLANS



JFK Middle School Feasibility Study – Preferred Site Plan



CONCEPT PLAN

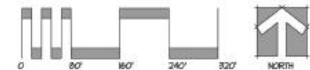
JOHN F. KENNEDY MIDDLE SCHOOL

155 RAFFIA ROAD
ENFIELD, CONNECTICUT

MAY 2017

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Architects - Engineering - Interior Designers
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Tel. 203.234.9800 Fax. 203.234.9801
www.silverpetrucelli.com



JFK Middle School Feasibility Study – Conceptual Rendering



JFK Middle School Feasibility Study – Conceptual Rendering



JFK Middle School Feasibility Study – Total Project Costs

Description	Amount	Totals	Rate	Cost Basost per Unit
<i>Sub-total Direct Cost</i>	61,582,580	61,582,580		286.484 /sf
Design & Estimate Contingency	5,234,519		8.50 % T	24.351 /sf
<i>Total Direct Construction Cost</i>	5,234,519	66,817,099		310.835 /sf
Escalation @ 4% annual	5,345,368		8.00 % T	24.867 /sf
	5,345,368	72,162,467		335.702 /sf
Sub Bond costs	902,031		1.25 % T	4.196 /sf
CM Insurances	767,177		1.05 % T	3.569 /sf
CM Staff Gen Conditions - 30M	2,250,000		L	10.467 /sf
	3,919,208	76,081,675		353.934 /sf
CM Contingency	2,662,859		3.50 % T	12.388 /sf
CM Fee	1,771,752		2.25 % T	8.242 /sf
	4,434,611	80,516,286		374.564 /sf
Surety Bond	805,163		1.00 % T	3.746 /sf
<i>Total with Indirect Cost</i>	805,163	81,321,449		378.310 /sf
Architects & Engineers Fees	4,472,680		5.50 % T	20.807 /sf
FF&E/Tech pkg \$3,700/student	4,495,500		L	20.913 /sf
Other Professional Fees	1,583,034		L	7.364 /sf
Owners Contingency	2,756,180		3.00 % T	12.822 /sf
<i>Total with Soft Costs</i>	13,307,394	94,628,843		440.216 /sf
<u>Total</u>		<u>94,628,843</u>		<u>440.216 /sf</u>

JFK Middle School Feasibility Study – Cost to Enfield

John F. Kennedy Middle School
State Project No. TMP-049-RQDD

Thursday, June 29, 2017

Town's Share (as designed)

Description	Amount	Ineligible	Notes
Project Cost	\$94,628,843		
Finance Costs			
Bond Origination Fees		\$ 229,644	Town responsible for full amount
Interest		\$ 191,000	Town responsible for full amount
Misc. Town Expenses			
Recording Secretary		\$ 20,000	Town responsible for full amount
Limited Eligible Costs			
Auditorium Seating		\$ -	50% of estimated amount
Gymnasium		\$ 14,083	50% of estimated amount
Tennis, B-Ball, Fields		\$ 678,692	50% of estimated amount
Ineligible Costs			
Pool		\$ 820,000	Town responsible for full amount
Auditorium		\$ 3,055,008	Town responsible for full amount
Prorated share of A/E Fees		\$ 45,000	
Total Ineligibles		\$ 5,053,407	
Town's Share less ineligibles @29.29%	\$26,236,645		Town responsible for full amount
State Change Orders			
SCO's	\$1,219,822		Estimated @ 1.5% of constr. Cost \$81,321,449
Potential CO's	\$ -		included above
Additional Town Purchases	\$ -		
CM Allowances	\$ -		
5% State Retainage	\$ 1,538,398		Returned less additional ineligible costs identified
Total Bond Obligation	\$ 34,048,271		
Retainage release	\$ 1,538,398		Assumes no additional ineligibles
Approved SCO's	\$817,281		Assumes 2/3 of submitted amount will be approved
Cost to Enfield	\$ 31,692,593		

JFK Middle School Feasibility Study – Alt. Maintenance Costs

Alternative Maintenance - Opinion of Probable Cost

30-Jun-17

JFK Pre-Referendum Committee
JFK Middle School

CONSTRUCTION ITEM	DESCRIPTION	COST
FACILITY CONDITION ANALYSIS	AS DEPICTED IN DRAFT REPORT	\$16,639,600.00
PCB/ASBESTOS/LEAD ABATEMENT	PER FUSS & O'NEILL REPORT	\$2,667,334.00
MASONRY REPLACEMENT	FOLLOWING ABATEMENT @ WINDOWS/LOUVERS	\$405,750.00
PORTABLE DEMOLITION		\$21,000.00
CLASSROOM ADDITION	TO REPLACE (3) PORTABLE CLASSROOMS	\$1,250,000.00
AUDITORIUM SEATING	475 SEATS @ \$300/SEAT	\$142,500.00
POOL REPAIRS & MAINTENANCE		\$387,649.00

SUB-TOTAL CONSTRUCTION ITEMS	\$21,513,833.00
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DESIGN & ESTIMATE CONTINGENCY	8.50%	\$1,828,675.81
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TOTAL CONSTRUCTION COST	\$23,342,508.81
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SOFT/INDIRECT COSTS	DESCRIPTION	COST
ESCALATION	4% ANNUAL (8 % TOTAL)	\$1,867,400.70
SUB BOND COSTS	1.25%	\$291,781.36
CM INSURANCES	1.05%	\$245,096.34
CM STAFF - GENERAL CONDITIONS	LUMP SUM	\$650,000.00
CM CONTINGENCY	3.50%	\$816,987.81
CM FEE	2.25%	\$525,206.45
SURETY BOND	1.00%	\$233,425.09
A/E FEES	5.50%	\$102,707.04
OTHER PROFESSIONAL FEES	LUMP SUM	\$250,000.00
OWNER'S CONTINGENCY	3.00%	\$8,753.44

BOND ORIGATION FEES	\$68,750.00
INTEREST	\$57,500.00

TOTAL w/ SOFT & INDIRECT COSTS	\$28,460,117.04
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JFK Middle School Feasibility Study

